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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/926,099 | 09/27/2001 | Akihito Shizuno | 212209US0 | 8185 14 |
| 22850 | 7590 | 10/03/2003 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | CHEVALIER, ALICIA ANN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1772 | 14 |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/926,099

Applicant(s)

SHIZUNO ET AL.

Examiner

Alicia Chevalier

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RESPONSE TO AMENDMENT

WITHDRAWN REJECTIONS

1. The 35 U.S.C. §102 rejection of claim 1 as anticipated by Suzuki et al. (4,718,152) of record in paper #11, pages 3-4, paragraph #3 has been withdrawn due to Applicant's amendment in paper #13.
2. The 35 U.S.C. §102 rejection of claims 1 and 2 as anticipated by Shizuno et al. (5,525,397) of record in paper #11, pages 4-5, paragraph #4 has been withdrawn due to Applicant's amendment in paper #13.
3. The 35 U.S.C. §102 rejection of claims 1 and 5 as anticipated by Murase et al. (5,718,972) of record in paper #11, pages 5-6, paragraph #5 has been withdrawn due to Applicant's amendment in paper #13.
4. The 35 U.S.C. §102 rejection of claims 1 and 2 as anticipated by Takeuchi et al. (5,958,555) of record in paper #11, pages 6-7, paragraph #6 has been withdrawn due to Applicant's amendment in paper #13.
5. The 35 U.S.C. §103 rejection of claim 3 over Shizuno et al. (5,525,397) in view of Takeuchi et al. (5,958,555) of record in paper #11, pages 8-9, paragraph #8 has been withdrawn due to Applicant's amendment in paper #13.
6. The 35 U.S.C. §103 rejection of claims 4, 9 and 10 over Shizuno et al. (5,525,397) of record in paper #11, pages 9-11, paragraph #9 has been withdrawn due to Applicant's amendment in paper #13.

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7. The 35 U.S.C. §103 rejection of claim 5 over Shizuno et al. (5,525,397) in view of Murase et al. (5,718,972) of record in paper #11, page 11, paragraph #10 has been withdrawn due to Applicant's amendment in paper #13.

NEW REJECTIONS

8. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 102

9. Claims 1, 2 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Schoots (4,704,113).

Schoots discloses a dressing used as a medical wipe/bulky sheet (col. 1, lines 14-17) comprising an entangled fiber aggregate having a number of projections and depressions, wherein the projections have corresponding depression on an opposite side of the sheet. The projections and depressions retain the shape by themselves. See the summary of the invention and figure 1. The dressing may be used as a single ply or multiple plies (network) (col. 4, lines 46-49). Furthermore the basis weight of the sheet is 20-60 grams per square yard (24-71 grams per square meter) (col. 4, lines 31-33).

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably

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conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitations “formed by water needling” – claims 1, “formed both by rearrangement of the constituting fibers of said fiber aggregate by water needling of said fiber aggregate and by the multiple bending manner of said fiber aggregate along the thickness direction thereof” – claim 1, “fibers caused by migrating of said fibers” – claims 1 and 11 are methods of production and therefore does not determine the patentability of the product itself.

Claim Rejections - 35 USC § 103

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoots (4,704,113) in view of Takeuchi et al. (5,958,555).

Schoots discloses all the limitations of the instant claimed invention except for the apparent thickness and apparent volume.

Takeuchi discloses a bulky sheet (cleaning sheet) comprising a fiber aggregate of a fiber web and a network sheet. The bulky sheet having a number of projections and depressions,

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which retain the shape by themselves, comprising the fiber aggregate. The constituting fibers of the fiber aggregate are further bonded to the network sheet thereby forming a unitary body. See figure 1. The basis weight of the nonwoven fiber aggregate falls within the range of 15 to 75 g/m² (col. 3, lines 49-60). The sheet has an apparent thickness relatively as large as 2.43 mm, so that the sheet is wholly bulky. The projections and depressions are formed at an appropriate extent so the sheet can effectively work for wiping off dust and fluff pulp (col. 13, lines 44-52 and table 1).

The exact apparent thickness and apparent volume of the sheet is deemed to be a cause effective variable with regard to the bulkiness of the sheet. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as apparent thickness and apparent volume of the sheet through routine experimentation in the absence of a showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art at the time of the invention would have been motivated by the disclosure of Takeuchi to optimize the apparent thickness and apparent volume of the Schoots' sheet in order to optimize the bulkiness of the sheet to improve the effectiveness of the wipe at removing dust and other things.

11. Claims 4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoots (4,704,113) in view of Shizuno et al. (5,525,397).

Schoots discloses all the limitations of the instant claimed invention except for having an elongation of 5% or less in the machine direction thereof measured under the condition of

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5N/30mm, the network sheet has a heat shrinkage of 3% or less as measured under 140 for 3 minutes, or having a breaking strength of at least 5 N at the width of the specimen of 30mm.

Shizuno discloses that that it is important for the cleaning sheet in accordance with the present invention, which comprises the network sheet and the fiber aggregate, that the breaking strength of the cleaning sheet is 500g/30mm or more, preferably 1000g/30mm or more, that the elongation at a load of 500g/30mm is 10% or less, preferably 7% or less. If the breaking strength of the cleaning sheet is lower than 500g/30mm, the cleaning sheet will tend to break during the cleaning operation. The elongation of the cleaning sheet is preferably as low as possible. If the elongation of the cleaning sheet as a load of 500g/30mm is greater than 10% distortion or twisting of the cleaning sheet will occur during the cleaning operation, and therefore the cleaning sheet will become inconvenient to handle.

The exact elongation and the breaking strength of the sheet is deemed to be a cause effective variable with regard to the strength of the sheet. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as elongation and the breaking strength of the sheet through routine experimentation in the absence of a showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art at the time of the invention would have been motivated to optimize the values in Schoots to improve the strength of the sheet to prevent the sheet from breaking, distorting, twisting, etc., as disclosed by Shizuno.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoots (4,704,113) in view of Murase et al. (5,718,972).

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Schoots discloses all the limitations of the instant claimed invention except for the fineness of the sheet being of 5 dtex or less.

Murase discloses a bulky sheet (cleaning sheet) comprising a fiber aggregate of a fiber web. The bulky sheet having a number of projections and depressions, which retain the shape by themselves, comprising the fiber aggregate. See figure 7. The basis weight of fiber aggregate falls within the range of 10 to 250 g/m² and has a fineness of 2-12 denier (2.2-13.3 dtex). If the fineness is more than 12 denier, the filaments are excessively thick, and it becomes difficult to obtain a web of good appearance/softness/feel at a low weight. See column 5, lines 19-22 and column 8, line 65 to column 9, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use fibers with fineness of 5 dtex or less as the fibers in Schoots as taught by Murase because a finer fiber would give the sheet a better appearance/softness/feel at a low weight.

ANSWERS TO APPLICANT'S ARGUMENTS

13. Applicant's arguments 35 U.S.C. §102 and §103 of record have been considered but are moot since the rejections have been withdrawn.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9306. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

9/21/03


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

9/22/03